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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/867,901	05/30/2001	Nancy R. Kelly	D/98467D	8012

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EXAMINER

CARTER, TIA A

ART UNIT	PAPER NUMBER
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2622

DATE MAILED: 10/01/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/867,901

Applicant(s)

KELLY ET AL.

Examiner

Tia A Carter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.                      6) ☐ Other: .

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelley et al. (US. 5528387) in view of Morton et al. (US. 4833722).

Regarding claim [1], Kelley et al. disclose a system for electronically registering an image on an input document, comprising:

Scanning means for generating an image data stream representing an electronic image of the image on the input document (Fig. 1, col. 2, lines 16-18).

Edge detecting means, operatively connected to said scanning means, for detecting edge data within the image data stream (Fig. 1, col. 2, lines 18-20).

First corner detecting means, operatively connected to said edge detecting means, for detecting a first corner of a leading edge of the input document based on the detected edge data and for establishing a first coordinate value therefrom (Fig. 1, col. 2, lines 20-24).

Second corner detecting means, operatively connected to said edge detecting means, for detecting a second corner of a leading edge of the input document based on

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the detected edge data and for establishing a second coordinate value therefrom (Fig. 1, col. 2, lines 28-32).

Kelley et al **do not disclose** edge range determining means for determining a minimum and maximum location for leading edge of the scanned document and for determining a minimum and maximum location for a trailing edge of the scanned document; and

Kelley et al. **do not disclose** window means for generating an image window representing valid image data to processed and rendered based on said minimum and maximum location for a leading edge of the scanned document, said minimum and maximum location for a trailing edge of the scanned document, said first coordinate value, and said second value.

Morton et al. **disclose** edge range determining means for determining a minimum and maximum location for leading edge of the scanned document and for determining a minimum and maximum location for a trailing edge of the scanned document; (Figs. 12A-C & 21A-C, col. 14, lines 16-40) and

Morton et al. **disclose** window means for generating an image window representing valid image data to processed and rendered based on said minimum and maximum location for a leading edge of the scanned document, said minimum and maximum location for a trailing edge of the scanned document, said first coordinate value, and said second value (Figs. 12A-C & 21A-C, col. 14, lines 42-68 and col. 15, lines 1-10).

The histograms developed upon the basis of the pixels assist with the determination of the image area and the data is sent to the window frame buffer for generating a image window area equivalent to that calculated.

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It would be obvious to one skilled in the art at the time of the invention to modify Kelley et al. wherein the detected and determined edge values are commonly applied to a set window/ frame size for a proper sizing of the scanned document.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to combine Morton et al. with Kelley et al. to achieve the limitation set forth in claim 1.

Regarding claim [2], Kelley et al. disclose the system as claimed in claim 1, wherein said first corner detecting means establishes the first coordinate value as being equal to the coordinate value of the detected corner when the first corner is detected within a predetermined number of scanlines (Figs. 1-2, col. 3, lines 55-64).

Regarding claim [3], Kelley et al. disclose the system as claimed in claim 1, wherein said first corner detecting means establishes the first coordinate value as being equal to the coordinate value of the detected corner when the first corner is detected within predetermined pixels of nominal center value (Figs, 1-2, col. 4, lines 3-8).

Regarding claim [4], Kelley et al. disclose the system as claimed in claim 1.

Kelley et al. **do not disclose** wherein said window means creates a scanning window, which encloses all four corners of the document being scanned.

Morton et al. **disclose** wherein said window means creates a scanning window, which encloses all four corners of the document being scanned (Figs. 12a-c, col. 49, lines 12-15).

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It would be obvious to one skilled in the art at the time of the invention to modify Kelley et al. wherein the detected and determined edge values are commonly applied to a set and/or created window frame size for a proper sizing of the scanned document.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to combine Morton et al. with Kelley et al. to achieve the limitation set forth in claim 4.

Regarding claim [5], Kelley et al. disclose the system as claimed in claim 1.

Kelley et al. **do not disclose** wherein said window means creates a scanning window, which is within all four corners of the document being scanned.

Morton et al. **disclose** wherein said window means creates a scanning window, which is within all four corners of the document being scanned (Figs. 12a-c, col. 49, lines 16-18).

It would be obvious to one skilled in the art at the time of the invention to modify Kelley et al. wherein the detected and determined edge values are commonly applied to a set and/or created window frame size for a proper sizing of the scanned document.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to combine Morton et al. with Kelley et al. to achieve the limitation set forth in claim 5.

Regarding claim [6], Kelley et al. disclose a method for electronically registering an image on an input document, comprising the steps of:

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(a) generating an image data stream representing an electronic image of the image on the input document (Fig. 1, col. 2, lines 16-18).

(b) detecting edge data within the image data stream (Fig. 1, col. 2, lines 18-20).

(c) detecting a first corner of a leading edge of the input document based on the detected edge data and for establishing a first coordinate value therefrom (Fig. 1, col. 2, lines 20-24).

(d) detecting a second corner of a leading edge of the input document based on the detected edge data and for establishing a second coordinate value therefrom (Fig. 1, col. 2, lines 28-32).

Kelley et al **do not disclose** (e) determining a minimum and maximum location for leading edge of the scanned document

Kelley et al. **do not disclose** (f) determining a minimum and maximum location for a trailing edge of the scanned document; and

Kelley et al. **do not disclose** (g) generating an image window representing valid image data to processed and rendered based on said minimum and maximum location for a leading edge of the scanned document, said minimum and maximum location for a trailing edge of the scanned document, said first coordinate value, and said second value.

Morton et al. **disclose** (e) determining means for determining a minimum and maximum location for leading edge of the scanned document (Figs. 12A-C & 21A-C, col. 14, lines 24-30)

Morton et al. **disclose** (f) determining a minimum and maximum location for a trailing edge of the scanned document; (Figs. 12A-C & 21A-C, col. 14, lines 24-30) and

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Morton et al. **disclose** (g) generating an image window representing valid image data to processed and rendered based on said minimum and maximum location for a leading edge of the scanned document, said minimum and maximum location for a trailing edge of the scanned document, said first coordinate value, and said second value (Figs. 12A-C & 21A-C, col. 14, lines 42-68 and col. 15, lines 1-10).

The histograms developed upon the basis of the pixels assist with the determination of the image area and the data is sent to the window frame buffer for generating a image window area equivalent to that calculated.

It would be obvious to one skilled in the art at the time of the invention to modify Kelley et al. wherein the detected and determined edge values are commonly applied to a set window/ frame size for a proper sizing of the scanned document.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to combine Morton et al. with Kelley et al. to achieve the limitation set forth in claim 6.

Regarding claim [7], Kelley et al. disclose the method as claimed in claim 6, wherein said step (c establishes the first coordinate value as being equal to the coordinate value of the detected corner when the first corner is detected within a predetermined number of scanlines (Figs. 1-2, col. 3, lines 55-64). Where Vco is first coordinate value.



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Regarding claim [8], Kelley et al. disclose the method as claimed in claim 6, wherein said step (c) establishes the first coordinate value as being equal to the coordinate value of the detected corner when the first corner is detected within predetermined pixels of nominal center value (Figs. 1-2, col. 4, lines 3-8). Where Vco is first coordinate value.

Regarding claim [9], Kelley et al. disclose the method as claimed in claim 6.

Kelley et al. **do not disclose** (g) creates a scanning window, which encloses all four corners of the document being scanned.

Morton et al. **disclose** (g) creates a scanning window, which encloses all four corners of the document being scanned (Figs. 12a-c, col. 49, lines 12-15).

It would be obvious to one skilled in the art at the time of the invention to modify Kelley et al. wherein the detected and determined edge values are commonly applied to a set and/or created window frame size for a proper sizing of the scanned document.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to combine Morton et al. with Kelley et al. to achieve the limitation set forth in claim 9.

Regarding claim [10], Kelley et al. disclose the method as claimed in claim 6.

Kelley et al. **do not disclose** (g) creates a scanning window, which is within all four corners of the document being scanned.

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Morton et al. **disclose** (g) creates a scanning window, which is within all four corners of the document being scanned (Figs. 12A-c, col. 49, lines 16-18)

It would be obvious to one skilled in the art at the time of the invention to modify Kelley et al. wherein the detected and determined edge values are commonly applied to a set and/or created window frame size for a proper sizing of the scanned document.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to combine Morton et al. with Kelley et al. to achieve the limitation set forth in claim 10.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hatch et al. (US. 5384621), Park (US. 5870508), Tretter (US. 5901253), Sevier et al. (US. 59124448), Kulkarni et al. (US. 6360026), Nagao et al. (US. 5491759), Chen et al. (US. 4668995), and Mishima et al. (US. 6111667) are cited to related art with respect to edge detection and skew correction in an image processing apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tia A Carter whose telephone number is 703 - 306-5433. The examiner can normally be reached on M-F (9:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L Coles can be reached on 703-305-4712. The fax phone numbers


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for the organization where this application or proceeding is assigned are 703-746-6036 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-6056.

Tia A Carter  
Examiner  
Art Unit 2622

TAC  
September 16, 2002

  
EDWARD COLES  
SUPERVISORY PATENT EXAMINER  
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